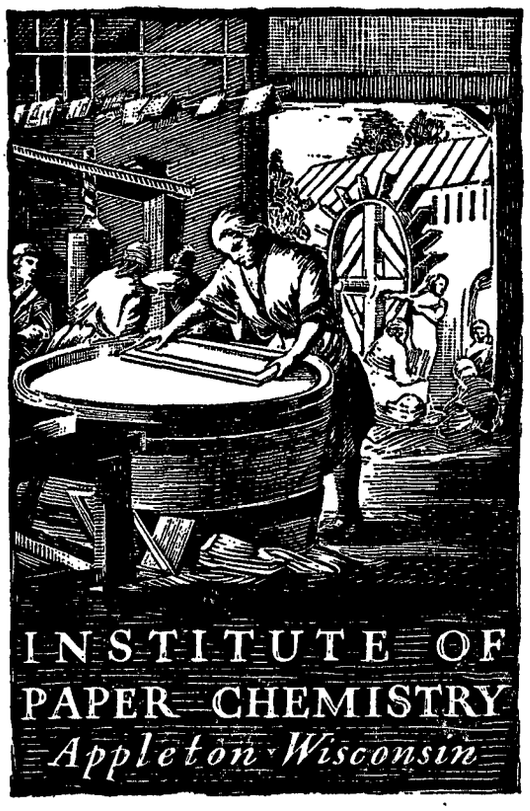

CONTINUOUS BASELINE STUDY

Project 1108-13

Progress Report 102

to

FOURDRINIER KRAFT BOARD INSTITUTE, INC.

January 1, 1956

THE INSTITUTE OF PAPER CHEMISTRY

APPLETON, WISCONSIN

CONTINUOUS BASELINE STUDY

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Fourdrinier Kraft Board Institute, Inc.

January 1, 1956

THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

In conjunction with the F.K.I. Continuous Baseline Study, one hundred and thirteen different sample lots of 42-lb. Fourdrinier kraft linerboard were submitted by seventeen different F.K.I. mills to The Institute of Paper Chemistry for testing during the period December 1 through December 31. In addition to the 42-lb. kraft linerboard, one sample of drum linerboard and four samples of miscellaneous linerboard were submitted for evaluation by one of the participating mills. The results on the special stock are tabulated separately in this report. A tabulation on the number of samples classified according to mill may be seen in Table I.

TABLE I

DISTRIBUTION OF 42--LB. LINERBOARD SAMPLES

Mill Code	Samples Submitted
A	10
B	4
C	8
D	12
E	3
F	8
G	8
H	10
I	8
J	6
K	2
L	6
M	4
N	6
O	4
P	10
Q	4
	113

These sample lots were tested for basis weight, caliper, bursting strength, and Elmendorf tear. The average strength results for each mill may be seen in Table II and are graphically presented in Figures 1 to 5. In addition to a comparison of the mill averages for the various tests, Table II also shows the current F.K.I. averages, the cumulative F.K.I. averages, and the F.K.I. indexes. The cumulative F.K.I. average is based on the results for the previous twelve months excluding the current period. Hence, in the case of the current report, it covers the period from December 1, 1954, to November 30, 1955. The F.K.I. indexes are obtained as follows:

$$\frac{\text{current F.K.I. average}}{\text{cumulative F.K.I. average}} \times 100 = \text{F.K.I. index (\%)}$$

The F.K.I. index provides a ready means of comparing the current quality with previous results. For example, the current F.K.I. average basis weight is 43.0 lb. The cumulative F.K.I. average basis weight is also 43.0 lb. Hence, the index for basis weight determined in per cent as indicated above is 100.0. This signifies that the current average basis weight is the same as the cumulative average, which in this case covered the period from December 1, 1954, through November 30, 1955.

A comparison of the results in Table II and Figure 1 shows that the average basis weight results for all mills conform to the 42-lb. specification set forth in Rule 41. Mill K has the highest average basis weight, it being 45.0 lb. or approximately 7.1% higher than the 42-lb. specification. On the other hand, Mill F has the lowest average basis weight, it being 42.1 lb., 0.2% higher than the 42-lb. specification.

The amount by which the mills vary from the 42-lb. specification is as follows:

Mill Code	Per cent
A	+3.8
B	+1.7
C	+3.8
D	+2.4
E	+1.0
F	+0.2
G	+4.0
H	+1.9
I	+2.1
J	+2.9
K	+7.1
L	+2.9
M	+1.4
N	+1.7
O	+1.7
P	+1.0
Q	+1.7

A comparison of the average basis weight data for the previous period with the current F.K.I. average indicates that the basis weight results have remained the same.

A comparison of the average caliper values for the various mills (see Figure 2) shows that the mill averages vary from a low of 11.4 for Mill O to a high

of 13.8 for Mill C, the average being 12.6 which is slightly lower than the cumulative F.K.I. average of 12.8.

The average bursting strength values obtained for each mill are graphically presented in Figure 3. It may be observed in Table II that the average bursting strength values for the various mills range from a low of 99 for Mill C to a high of 118 for Mill B. The current F.K.I. average bursting strength is 109, slightly lower than the cumulative F.K.I. average of 110.

A graphic comparison of the Elmendorf tear results for the various mills is given in Figures 4 and 5. The data of Table II show that Mill K has the highest average machine direction tear value of 406 units whereas Mill B has the lowest value of 303 units. Mills K and B also have the highest and lowest cross-machine tear values, 406 and 355 units, respectively. It may be noted that the current F.K.I. average machine and cross-machine direction tear results are slightly lower than the cumulative averages.

A comparison of the F.K.I. indexes indicates that, for the current period, the current F.K.I. averages for caliper, bursting strength, and Elmendorf tear, are slightly lower than the respective cumulative F.K.I. averages, whereas the current F.K.I. average for basis weight is the same as the cumulative.

In order to compare the variation within a given mill, the test results for each particular mill have been tabulated in Tables III to XIX for Mills A to Q, respectively. In addition to the current and cumulative averages, the mill factor and mill index are given for each mill. The cumulative mill average is the average test result obtained on the samples submitted by the particular mill for the previous twelve months excluding the current period. The mill factor and the mill index are obtained as follows:

$$\frac{\text{current mill average}}{\text{cumulative mill average}} \times 100 = \text{mill factor (\%)}$$

$$\frac{\text{current mill average}}{\text{cumulative F.K.I. average}} \times 100 = \text{mill index (\%)}$$

The mill factor and the mill index serve as a ready means for comparing the current mill results either with the previous results for that particular mill or with the cumulative F.K.I. results. The reports also contain a comparison of the test data obtained at the mills with test data obtained at The Institute of Paper Chemistry.

The results obtained on the special drum stock may be seen in Table XX.

It may be noted in Table III through XX that the test data include information about the sheet finish. The summarized results for the mills which submitted sample lots during the current period are as follows:

Mill Code	No. of Sample Lots W.F.	D.F.	Misc.
A	10		
B	4		
C	8[a]		
D	12		
E	1,2[a], 1[b]		
F	8		
G	8		
H	10		
I	8[a]		
J	2	4	
K	2		
L			6[c]
M	4		
N	6[a]		
O	4		
P	10		
Q	4[a]		

[a] One side only
[b] Drum linerboard
[c] Sheet finish not reported

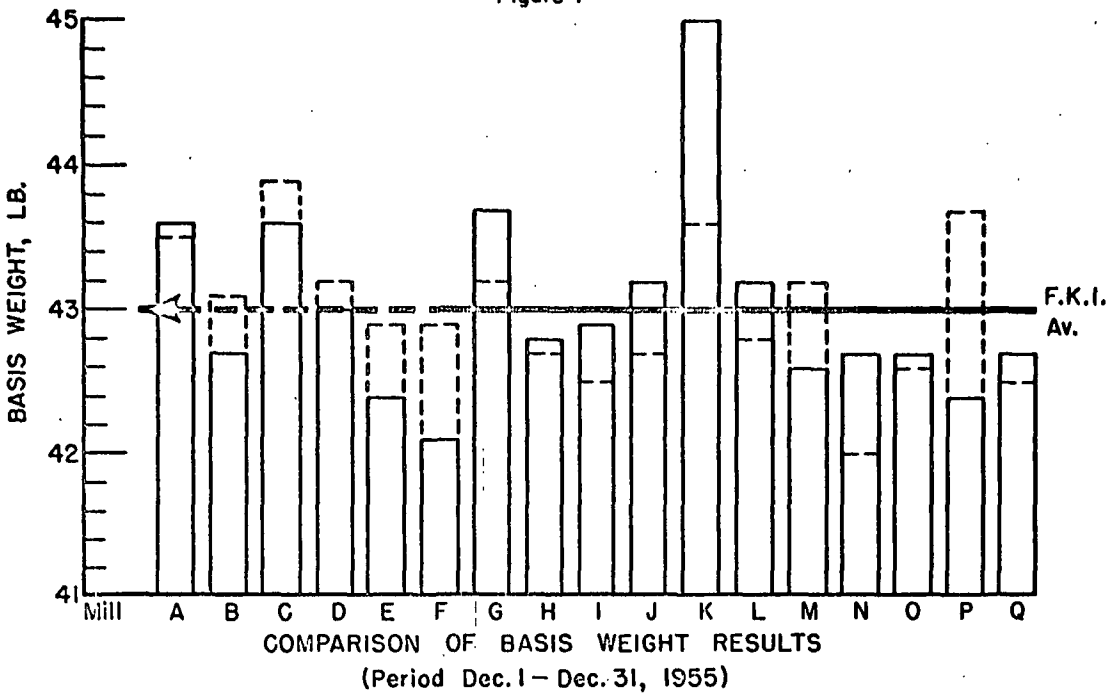
The results indicate that a majority of the mills are using a water finish on their 42-lb. linerboard.

TABLE II

SUMMARY OF COMPOSITE MILL AVERAGES--DECEMBER 1 THROUGH DECEMBER 31, 1955

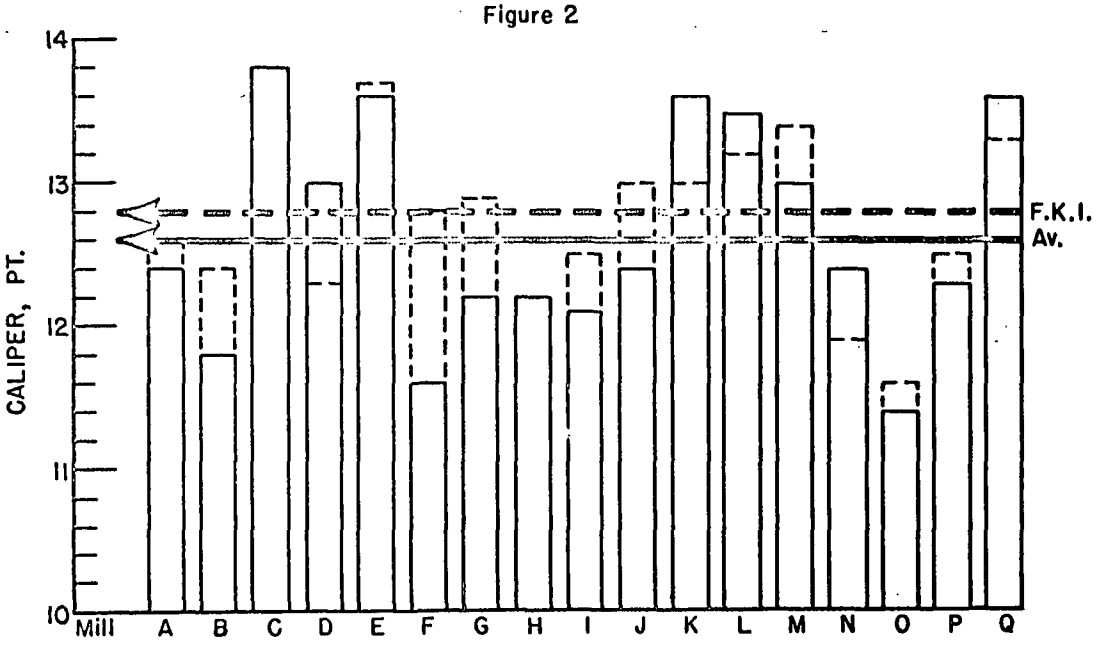
Mill	Basis Weight, lb.	Caliper, points	Bursting Strength, p.s.i. gage	Elmendorf Tear, g./sheet	
				In Machine	Cross Machine
A	43.6	12.4	114	332	383
B	42.7	11.8	118	303	355
C	43.6	13.8	99	342	369
D	43.0	13.0	109	353	386
E	42.4	13.6	101	325	363
F	42.1	11.6	107	376	404
G	43.7	12.2	117	325	394
H	42.8	12.2	112	353	385
I	42.9	12.1	106	307	364
J	43.2	12.4	111	359	372
K	45.0	13.6	112	406	406
L	43.2	13.5	111	343	378
M	42.6	13.0	106	350	381
N	42.7	12.4	107	362	393
O	42.7	11.4	112	348	376
P	42.4	12.3	108	344	380
Q	42.7	13.6	101	331	360
Current FKI Average:	43.0	12.6	109	345	379
Cumulative FKI Average:	43.0	12.8	110	355	384
FKI Index, %	100.0	98.4	99.1	97.2	98.7

Figure 1



COMPARISON OF BASIS WEIGHT RESULTS
(Period Dec. 1 – Dec. 31, 1955)

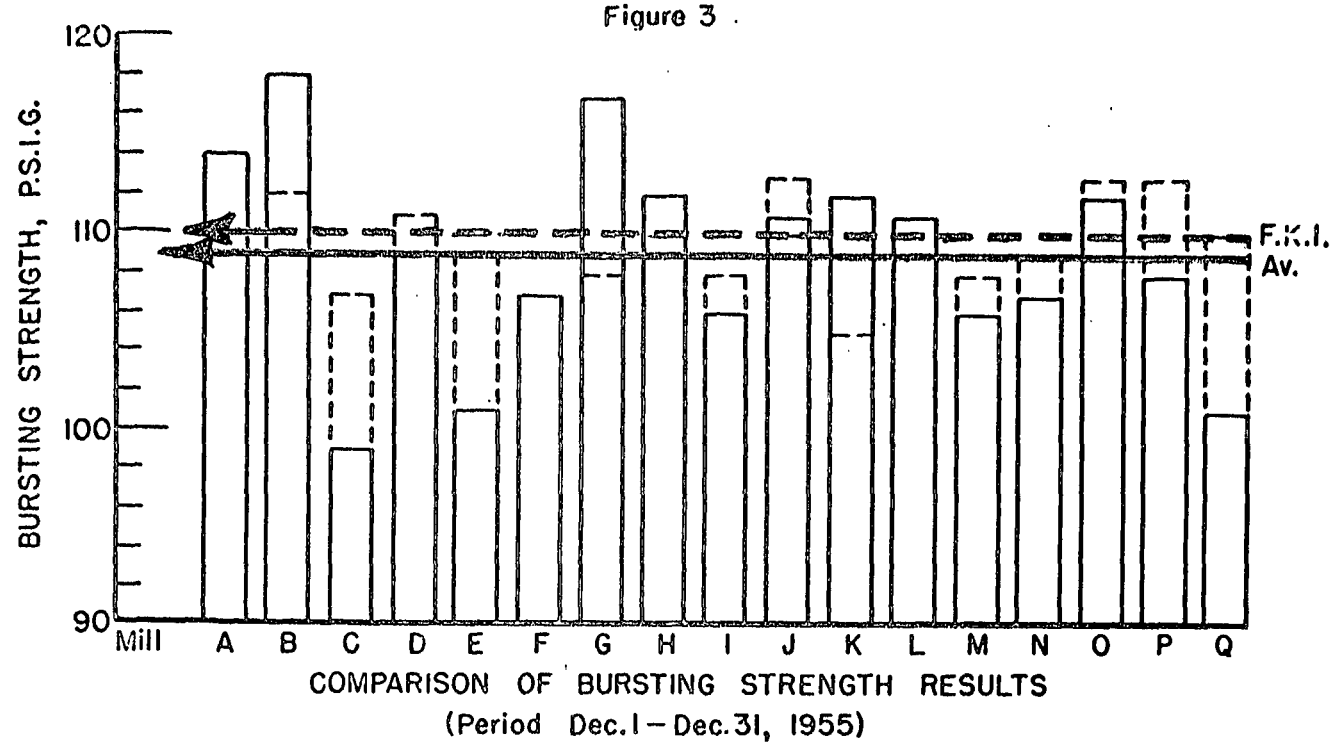
Figure 2



COMPARISON OF CALIPER RESULTS
(Period Dec. 1 – Dec. 31, 1955)

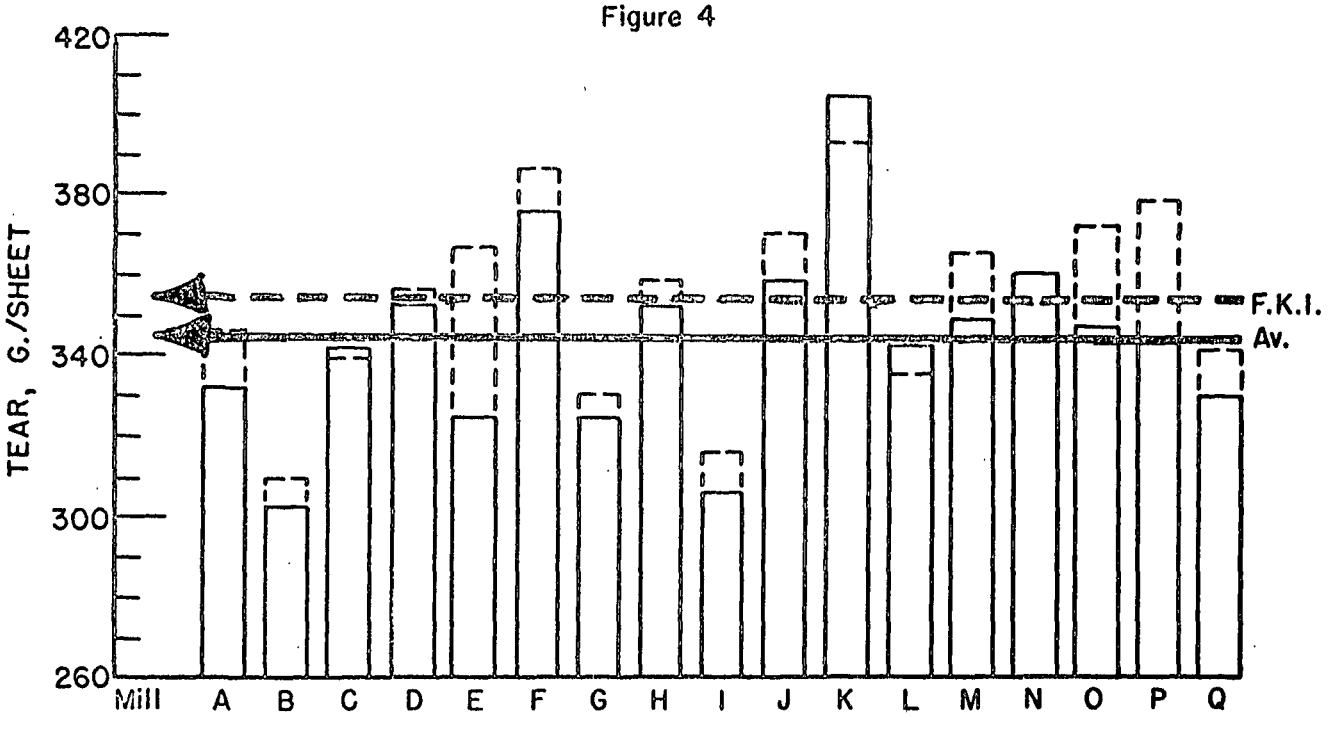
——— Current mill average
– – – – Cumulative mill average

Figure 3



COMPARISON OF BURSTING STRENGTH RESULTS
(Period Dec. 1 – Dec. 31, 1955)

Figure 4



COMPARISON OF TEAR RESULTS, Machine Direction
(Period Dec. 1 – Dec. 31, 1955)

——— Current mill average
– – – – – Cumulative mill average

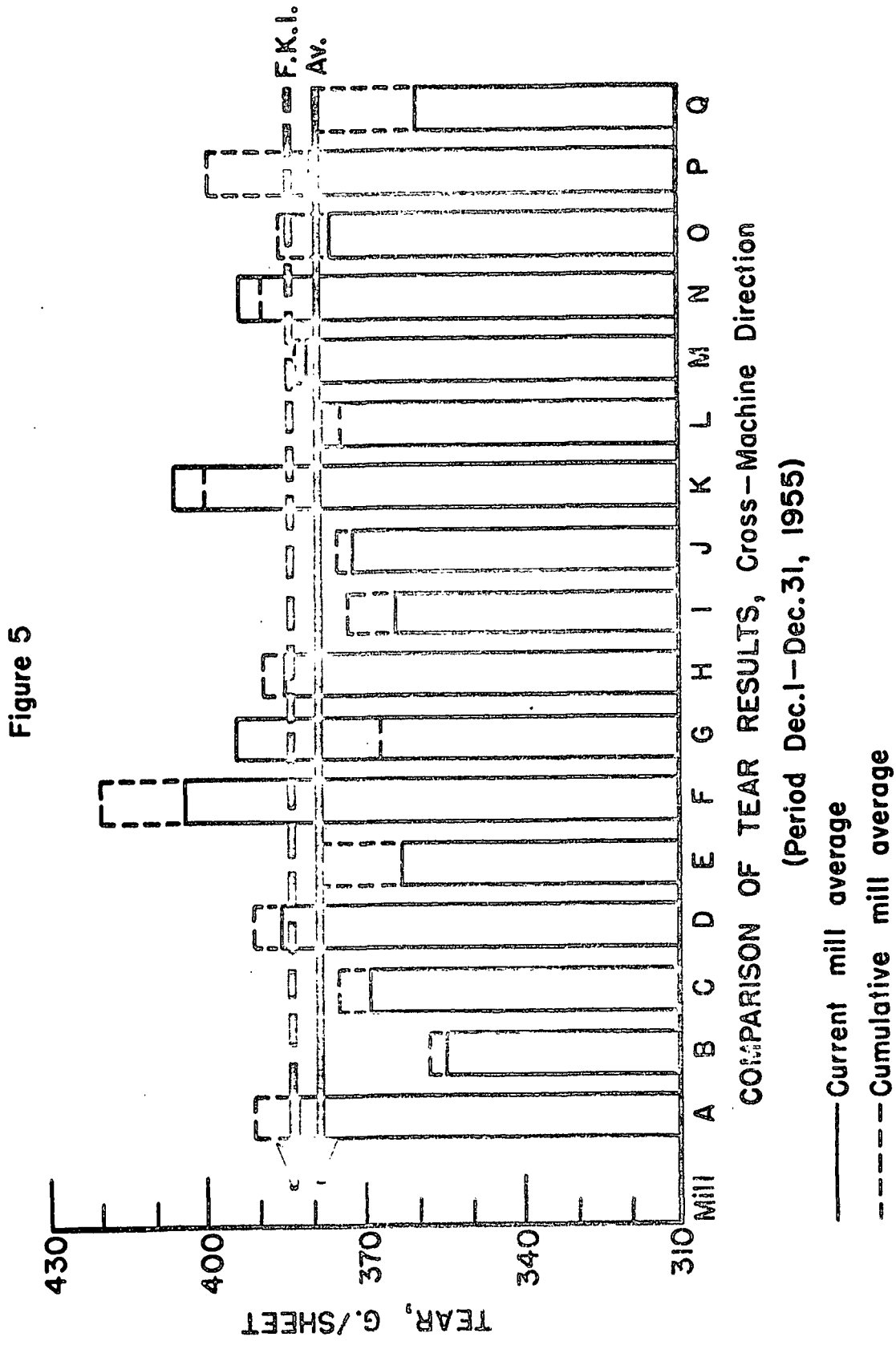

F.K.I. Av.
A B C D E F G H I J K L M N O P Q
Mill
310
340
370
400
430
TEAR, G./SHEET
COMPARISON OF TEAR RESULTS, Cross-Machine Direction
(Period Dec.1–Dec.31, 1955)
Current mill average
Cumulative mill average

Figure 5

SUMMARY OF INSTITUTE DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955

TABLE III

MILL A--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
166988	A-706	W.F	12/ 2/55	11/20/55	2	44.8	43.8	44.1	13.0	12.2	12.6	136	80	116	384	328	347	440	360	405[a]
166989	A-707	W.F.	12/ 2/55	11/22/55	2	45.4	43.8	44.4	13.0	12.3	12.6	133	81	117	368	296	337[a]	456	352	405[a]
167200	A-708	W.F.	12/13/55	11/27/55	2	44.2	42.8	43.4	12.5	11.0	12.0	134	89	115	352	280	317[a]	408	344	373[a]
167201	A-709	W.F	12/13/55	11/27/55	2	44.0	42.4	43.1	12.6	11.1	11.9	132	96	114	336	272	314	400	344	368[a]
167364	A-710	W.F.	12/19/55	12/ 4/55	1	44.0	42.2	43.1	13.0	12.4	12.7	134	89	108	408	304	341	416	336	385[a]
167365	A-711	W.F.	12/19/55	12/ 4/55	1	44.0	42.0	43.3	13.0	12.2	12.6	129	82	114	400	304	341	416	336	375[a]
167450	A-712	W.F.	12/21/55	12/11/55	2	44.0	42.2	43.5	12.9	12.0	12.5	131	88	116	392	272	333	432	320	387[a]
167451	A-713	W.F.	12/21/55	12/11/55	2	44.0	42.6	43.2	13.0	12.0	12.5	124	71	112	376	312	333	392	336	372[a]
167499	A-714	W.F.	12/22/55	12/18/55	1	44.4	43.6	44.0	12.8	11.9	12.2	134	100	114	368	296	329[a]	424	344	373[a]
167498	A-715	W.F.	12/22/55	12/18/55	2	45.2	43.4	44.3	13.0	11.9	12.4	140	91	114	368	272	328	416	360	385[a]
Current Mill Average:								43.6			12.4			114			332			383
Cumulative Mill Average:								43.5			12.6			114			347			391
Mill Factor, %								100.2			98.4			100.0			95.7			98.0
Mill Index, %								101.4			96.9			103.6			93.5			99.7

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE IV

MILL B--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i.gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
167286	B-1254	W.F.	12/15/55	11/21/55	1	44.0	41.8	42.6	12.7	11.4	11.9	130	101	118	352	248	305	440	336	361[a]
167287	B-1255	W.F.	12/15/55	11/24/55	1	44.0	41.8	43.0	12.3	11.1	11.9	141	98	118	368	248	300	448	320	374[a]
167288	B-1256	W.F.	12/15/55	12/ 5/55	1	44.0	41.2	42.7	12.2	11.4	11.7	131	100	118	376	256	307[a]	352	304	344[a]
167289	B-1257	W.F.	12/15/55	12/ 8/55	1	43.6	42.0	42.5	12.2	11.3	11.7	138	102	120	368	272	299[a]	384	288	342[a]
Current Mill Average:								42.7			11.8			118			303			355
Cumulative Mill Average:								43.1			12.4			112			310			358
Mill Factor, %								99.1			95.2			105.4			97.7			99.2
Mill Index, %								99.3			92.2			107.3			85.4			92.4

[a] This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE V

MILL C--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
167473	C-713	WF ISL	12/22/55	11/16/55	1	45.0	43.2	44.1	14.6	13.1	13.8	118	73	96	392	296	342[a]	416	328	371[a]
167474	C-714	WF ISL	12/22/55	11/16/55	1	45.0	43.2	44.2	14.4	13.0	13.8	121	75	100	400	304	351[a]	448	320	381[a]
167475	C-715	WF ISL	12/22/55	11/29/55	1	44.8	42.8	43.7	14.3	13.5	13.9	116	88	99	368	320	345[a]	416	320	362[a]
167476	C-716	WF ISL	12/22/55	11/29/55	1	44.4	42.8	43.7	14.4	13.3	13.9	113	81	97	400	304	347[a]	416	320	365[a]
167453	C-717	WF ISL	12/21/55	12/ 6/55	1	43.6	42.0	42.5	14.9	13.2	13.9	109	74	96	376	304	338	384	320	357[a]
167454	C-718	WF ISL	12/21/55	12/ 6/55	1	43.2	42.0	42.3	14.3	13.1	13.5	121	78	102	376	288	328[a]	416	320	363[a]
167455	C-719	WF ISL	12/21/55	12/11/55	1	45.4	43.6	44.4	14.3	13.2	13.8	125	82	103	392	288	347	432	352	381[a]
167464	C-720	WF ISL	12/21/55	12/11/55	1	45.0	43.2	44.1	14.1	13.2	13.7	117	77	102	392	304	341[a]	432	328	375[a]
Current Mill Average:								43.6			13.8			99			342			369
Cumulative Mill Average:								43.9			13.8			107			339			375
Mill Factor, %								99.3			100.0			92.5			100.9			98.4
Mill Index, %								101.4			107.8			90.0			96.3			96.1

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE VI

MILL D--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
166992	D-921	W.F.	12/ 2/55	11/23/55	4	44.0	42.0	43.3	13.5	13.0	13.2	131	76	107	408	304	357[a]	416	352	396[a]
166993	D-922	W.F.	12/ 2/55	11/24/55	4	44.2	43.4	43.9	14.1	12.9	13.4	128	78	106	408	328	368[a]	488	368	411[a]
166994	D-923	W.F.	12/ 2/55	11/25/55	4	43.6	41.4	42.6	13.4	12.6	13.0	119	84	101	376	280	329[a]	456	328	375[a]
167003	D-924	W.F.	12/ 5/55	12/ 1/55	4	43.6	42.6	43.3	13.4	12.6	13.0	130	88	110	432	304	360[a]	408	352	380[a]
167004	D-925	W.F.	12/ 5/55	12/ 2/55	4	45.2	43.2	44.2	13.3	12.4	12.8	138	90	115	432	320	371[a]	520	368	423[a]
167005	D-926	W.F.	12/ 5/55	12/ 3/55	4	42.2	41.8	42.0	13.8	12.4	13.2	131	83	108	360	320	340[a]	432	352	388[a]
167255	D-927	W.F.	12/14/55	12/ 8/55	4	45.0	44.0	44.4	13.9	12.6	13.3	137	92	114	416	312	363[a]	472	352	421[a]
167256	D-928	W.F.	12/14/55	12/ 9/55	4	44.2	42.0	43.4	13.8	12.3	13.1	127	95	109	408	328	365[a]	424	320	373[a]
167257	D-929	W.F.	12/14/55	12/10/55	4	43.4	42.2	42.9	13.5	12.8	13.1	135	90	113	400	272	348[a]	432	352	386[a]
167338	D-930	W.F.	12/19/55	12/15/55	4	42.0	41.0	41.6	12.6	12.0	12.3	123	67	100	376	296	332[a]	400	296	342[a]
167339	D-931	W.F.	12/19/55	12/16/55	4	43.6	41.8	42.3	13.4	12.1	12.8	139	78	108	408	312	359[a]	392	288	355[a]
167340	D-932	W.F.	12/19/55	12/17/55	4	43.6	42.2	42.6	13.2	12.0	12.5	138	86	112	368	304	341[a]	440	328	385[a]
Current Mill Average:								43.0			13.0			109			353			386
Cumulative Mill Average:								43.2			12.3			111			357			391
Mill Factor, %								99.5			105.7			98.2			98.9			98.7
Mill Index, %								100.0			101.6			99.1			99.4			100.5

[a] This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE VII

MILL E--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
167029	E-188	W.F.	12/ 7/55	12/ 2/55	2	44.2	42.6	43.2	14.3	13.1	13.9	113	75	102	432	312	353[a]	448	336	378[a]
167368	E-191	WF1S	12/19/55	12/13/55	2	44.6	42.4	43.4	15.0	13.9	14.4	126	88	105	384	272	325[a]	408	328	381[a]
167529	E-194	WF1S	12/27/55	12/23/55	2	41.4	39.6	40.6	13.4	11.8	12.7	112	81	97	352	248	297[a]	368	304	330[a]
Current Mill Average:								42.4			13.6			101			325			363
Cumulative Mill Average:								42.9			13.7			109			367			379
Mill Factor, %								98.8			99.3			92.7			88.6			95.8
Mill Index, %								98.6			106.2			91.8			91.5			94.5

[a] This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE VIII

MILL F--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
167202	F-64	W.B.	12/13/55	11/11/55	-	43.2	40.0	42.0	11.9	11.0	11.6	133	87	110	384	344	367[a]	488	360	417[a]
167203	F-65	W.B.	12/13/55	11/15/55	-	43.4	40.6	41.8	12.1	10.8	11.5	123	57	102	408	312	366[a]	424	368	394[a]
167090	F-66	W.B.	12/10/55	11/16/55	-	45.4	42.4	43.7	12.5	11.0	11.9	123	87	105	464	344	383[a]	440	360	411[a]
167091	F-67	W.B.	12/10/55	11/22/55	-	42.2	40.0	41.6	12.6	11.0	11.6	119	84	102	408	336	375[a]	448	352	404[a]
167138	F-68	W.B.	12/12/55	11/23/55	-	43.2	40.4	41.6	11.3	10.2	10.9	122	84	104	424	320	369[a]	408	336	371[a]
167139	F-69	W.B.	12/12/55	11/23/55	-	44.4	41.6	42.5	12.2	11.6	11.9	116	82	99	464	336	389[a]	440	400	423[a]
167291	F-70	W.B.	12/15/55	11/25/55	-	43.0	40.0	41.9	12.0	10.9	11.5	140	89	119	432	336	378[a]	448	384	410[a]
167292	F-71	W.B.	12/15/55	11/26/55	-	42.4	40.0	41.5	12.0	11.1	11.5	134	96	114	416	336	376[a]	440	368	402[a]
Current Mill Average:								42.1			11.6			107			376			404
Cumulative Mill Average:								42.9			12.8			107			387			420
Mill Factor, %								98.1			90.6			100.0			97.2			96.2
Mill Index, %								97.9			90.6			97.3			105.9			105.2

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE IX

MILL G--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
167204	G-693	W.F.	12/13/55	12/ 5/55	2	44.8	43.6	44.1	12.8	11.8	12.3	145	97	120	368	256	323[a]	448	360	399[a]
167205	G-694	W.F.	12/13/55	12/ 5/55	2	44.0	42.0	43.1	13.0	12.0	12.3	136	89	116	368	272	334	416	360	386[a]
167206	G-695	W.F.	12/13/55	12/ 5/55	2	45.4	43.0	44.2	13.0	12.0	12.2	146	106	121	368	256	328	440	360	407[a]
167290	G-696	W.F.	12/15/55	12/ 5/55	2	44.2	40.2	42.4	13.0	11.8	12.3	142	87	111	352	288	314[a]	456	352	397[a]
167307	G-697	W.F.	12/16/55	12/ 6/55	2	44.6	43.0	44.0	12.7	11.6	12.2	149	98	122	392	296	326[a]	440	376	410[a]
167366	G-698	W.F.	12/19/55	12/ 7/55	2	44.0	42.4	43.1	12.9	11.9	12.2	135	88	114	344	280	314	408	352	378[a]
167308	G-699	W.F.	12/16/55	12/ 7/55	2	45.8	42.4	44.2	12.6	11.0	11.9	140	92	117	376	296	336	440	360	396[a]
167309	G-700	W.F.	12/16/55	12/ 7/55	2	45.8	42.4	44.2	12.6	11.4	12.0	138	91	116	400	232	325[a]	424	360	380[a]
Current Mill Average:								43.7			12.2			117			325			394
Cumulative Mill Average:								43.2			12.9			108			331			367
Mill Factor, %								101.2			94.6			108.3			98.2			107.4
Mill Index, %								101.6			95.3			106.4			91.5			102.6

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE X

MILL H--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
166986	H-537	W.F.[b]	12/ 2/55	11/13/55	2	43.0	42.2	42.6	12.4	11.6	11.9	134	80	110	384	288	344[a]	400	352	379[a]
166987	H-538	W.F.[b]	12/ 2/55	11/14/55	2	43.8	42.6	43.3	12.5	11.2	12.0	139	92	113	400	312	362[a]	456	352	391[a]
167144	H-539	W.F.[b]	12/12/55	11/24/55	2	43.2	41.8	42.3	13.0	12.2	12.6	132	90	112	416	272	329[a]	392	344	372[a]
167145	H-540	W.F.[b]	12/12/55	11/25/55	2	43.2	42.0	42.2	12.8	11.8	12.3	132	83	110	424	264	343[a]	416	328	381[a]
167146	H-541	W.F.[b]	12/12/55	11/30/55	2	43.4	42.2	42.8	12.9	11.9	12.3	128	88	109	400	312	362[a]	464	368	413[a]
167147	H-542	W.F.[b]	12/12/55	12/ 1/55	2	43.2	42.0	42.3	13.0	11.8	12.4	135	88	109	432	336	371[a]	432	352	393[a]
167207	H-543	W.F.[b]	12/13/55	12/ 5/55	2	43.2	41.4	42.4	12.8	11.9	12.3	140	77	109	384	296	337	432	320	363[a]
167208	H-544	W.F.[b]	12/13/55	12/ 6/55	2	43.6	42.6	43.2	12.6	12.0	12.2	125	95	112	432	288	347[a]	432	328	375[a]
167530	H-545	W.F.[b]	12/27/55	12/16/55	2	44.0	42.4	43.4	12.7	11.8	12.2	136	92	119	448	344	379[a]	472	360	395[a]
167531	H-546	W.F.[b]	12/27/55	12/17/55	2	43.8	42.4	43.2	12.6	11.9	12.2	138	97	122	400	288	357[a]	432	352	389[a]
Current Mill Average:								42.8			12.2			112			353			385
Cumulative Mill Average:								42.7			12.2			109			359			389
Mill Factor, %								100.2			100.0			102.8			98.3			99.0
Mill Index, %								99.5			95.3			101.8			99.4			100.3

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

[b]The mill data sheet identifies the finish as WFlS.

SUMMARY OF INSTITUTE DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XI

MILL I--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
166985	I-509	WF1S	12/ 2/55	11/24/55	1	44.0	42.0	43.0	12.8	11.9	12.3	122	82	106	336	256	302[a]	416	336	367[a]
167142	I-509	WF1S	12/12/55	12/ 4/55	1	43.6	41.8	42.6	12.6	11.5	12.2	120	86	102	360	272	315[a]	384	336	358[a]
167092	I-510	WF1S	12/10/55	12/ 6/55	1	43.0	42.0	42.4	12.2	11.5	11.8	127	93	110	432	240	303[a]	392	328	357[a]
167284	I-511	WF1S	12/15/55	12/ 7/55	1	43.6	42.2	42.8	12.5	11.7	12.0	128	91	111	408	280	321[a]	448	336	380[a]
167452	I-512	WF1S	12/21/55	12/ 9/55	1	43.2	42.0	42.4	12.2	11.3	11.9	128	87	107	336	240	287	384	320	358[a]
167405	I-513	WF1S	12/20/55	12/12/55	1	44.0	42.0	43.2	12.8	11.9	12.3	117	87	103	344	272	299[a]	384	328	355[a]
167500	I-514	WF1S	12/23/55	12/15/55	1	46.0	44.0	44.4	13.0	11.9	12.4	123	92	107	368	272	323[a]	408	352	376[a]
167501	I-515	WF1S	12/23/55	12/16/55	1	43.8	42.2	42.8	12.8	11.3	11.9	123	88	105	384	248	307[a]	424	344	365[a]
Current Mill Average:								42.9			12.1			106			307			364
Cumulative Mill Average:								42.5			12.5			108			317			373
Mill Factor, %								100.9			96.8			98.1			96.8			97.6
Mill Index, %								99.8			94.5			96.4			86.5			94.8

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XII

MILL J--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
166990	J-567	D.F.	12/ 2/55	11/20/55	-	44.6	42.4	43.7	13.9	12.5	13.3	126	80	109	400	304	352[a]	416	352	374[a]
166991	J-568	D.F.	12/ 2/55	11/20/55	-	46.0	42.0	43.9	14.0	12.5	13.3	124	89	108	384	320	358[a]	408	336	373[a]
167467	J-569	D.F.	12/22/55	11/28/55	-	43.6	41.8	42.8	12.3	10.4	11.6	127	87	109	360	296	331[a]	376	312	343[a]
167468	J-570	D.F.	12/22/55	11/28/55	-	45.0	42.0	43.6	12.5	10.2	11.3	142	94	114	384	280	351[a]	384	336	360[a]
167469	J-571	W.F.	12/22/55	12/ 5/55	-	43.6	42.0	42.9	13.0	12.0	12.4	139	100	113	464	320	382[a]	440	336	391[a]
167470	J-572	W.F.	12/22/55	12/ 5/55	-	43.2	41.0	42.2	13.0	12.3	12.7	131	88	111	424	336	381[a]	464	344	391[a]
Current Mill Average:								43.2			12.4			111			359			372
Cumulative Mill Average:								42.7			13.0			113			371			375
Mill Factor, %								101.2			95.4			98.2			96.8			99.2
Mill Index, %								100.5			96.9			100.9			101.1			96.9

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XIII

MILL K--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
167297	K-36	S.F.	12/15/55	12/ 6/55	7	46.0	42.6	44.4	14.0	13.0	13.5	140	91	115	512	368	418	464	352	411[a]
167367	K-37	S.F.	12/19/55	12/13/55	7	46.6	44.0	45.5	13.9	13.2	13.6	123	88	108	432	352	393[a]	448	352	401[a]
Current Mill Average:								45.0			13.6			112			406			406
Cumulative Mill Average:								43.6			13.0			105			394			400
Mill Factor, %								103.2			104.6			106.7			103.0			101.5
Mill Index, %								104.7			106.2			101.8			114.4			105.7

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XIV

MILL L--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
167026	L-409		12/ 6/55	11/ 7/55	1	43.2	41.2	42.2	14.0	12.5	13.3	133	95	111	408	312	339[a]	416	352	377[a]
167027	L-410		12/ 6/55	11/10/55	1	44.6	42.2	43.2	14.5	12.7	13.6	127	88	109	400	296	353[a]	424	344	378[a]
167293	L-411		12/15/55	11/14/55	1	44.8	42.6	43.5	14.5	12.8	13.7	125	87	106	400	312	349[a]	416	328	388[a]
167294	L-412		12/15/55	11/19/55	1	44.0	42.2	43.1	14.8	13.1	13.9	136	77	107	392	296	340[a]	408	328	373[a]
167295	L-413		12/15/55	11/21/55	1	45.0	43.0	43.8	14.0	12.0	13.3	142	98	118	416	296	339[a]	416	336	375[a]
167296	L-414		12/15/55	11/25/55	1	44.0	42.4	43.3	14.1	12.8	13.5	142	92	114	408	288	337[a]	416	336	375[a]
Current Mill Average:								43.2			13.5			111			343			378
Cumulative Mill Average:								42.8			13.2			109			336			374
Mill Factor, %								100.9			102.3			101.8			102.1			101.1
Mill Index, %								100.5			105.5			100.9			96.6			98.4

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XV

MILL M--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
167093	M-352	W.	12/10/55	11/23/55	4	45.6	42.0	43.6	13.9	13.0	13.4	117	83	105	432	352	379[a]	472	352	387[a]
167094	M-353	W.	12/10/55	11/26/55	2	44.4	41.8	43.1	13.4	12.5	12.9	124	99	109	376	304	347	432	352	387[a]
167471	M-354	W.	12/22/55	12/ 5/55	2	44.0	40.2	41.8	13.3	12.0	12.8	122	94	106	464	312	345[a]	416	328	372[a]
167472	M-355	W.	12/22/55	12/ 9/55	2	44.2	39.2	41.8	13.1	12.0	12.6	119	84	104	344	280	327[a]	424	320	378[a]
Current Mill Average:								42.6			13.0			106			350			381
Cumulative Mill Average:								43.2			13.4			108			366			383
Mill Factor, %								98.6			97.0			98.1			95.6			99.5
Mill Index, %								99.1			101.6			96.4			98.6			99.2

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XVI

MILL N--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
166983	N-171	WFLS	12/ 2/55	11/18/55	1	43.2	42.0	42.2	13.2	12.0	12.7	120	90	104	376	280	333[a]	416	336	370[a]
166984	N-172	WFLS	12/ 2/55	11/19/55	1	44.0	42.0	42.9	13.2	12.0	12.5	122	92	103	424	304	358[a]	416	368	388[a]
167030	N-173	WFLS	12/ 7/55	11/29/55	1	44.0	42.4	43.1	13.1	12.1	12.5	124	82	102	424	344	379[a]	408	328	383[a]
167031	N-174	WFLS	12/ 7/55	11/30/55	1	43.6	42.4	43.0	13.2	12.0	12.5	137	87	107	400	296	355[a]	440	368	399[a]
167448	N-175	WFLS	12/21/55	12/ 8/55	1	44.0	42.0	43.0	13.0	12.0	12.3	130	109	117	424	336	383[a]	480	384	421[a]
167449	N-176	WFLS	12/21/55	12/ 9/55	1	42.2	41.8	42.0	12.8	11.8	12.2	132	95	112	400	328	361[a]	432	376	399[a]
Current Mill Average:								42.7			12.4			107			362			393
Cumulative Mill Average:								42.0			11.9			109			354			389
Mill Factor, %								101.7			104.2			98.2			102.3			101.0
Mill Index, %								99.3			96.9			97.3			102.0			102.3

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XVII

MILL O--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
167001	O-100	W.F.	12/ 3/55	11/18/55	4	43.0	41.4	41.9	11.4	10.9	11.1	121	96	107	368	288	331[a]	408	328	366[a]
167002	O-101	W.F.	12/ 3/55	11/18/55	4	43.6	42.0	42.8	11.8	11.0	11.3	128	95	109	376	304	341[a]	408	328	375[a]
167140	O-102	W.F.	12/12/55	11/27/55	4	43.6	42.4	43.0	12.0	11.2	11.7	128	95	113	400	336	361[a]	416	344	376[a]
167141	O-103	W.F.	12/12/55	11/27/55	4	44.4	42.0	43.0	12.0	11.2	11.5	131	100	117	384	320	358[a]	416	368	388[a]
Current Mill Average:								42.7			11.4			112			348			376
Cumulative Mill Average:								42.6			11.6			113			373			386
Mill Factor, %								100.2			98.3			99.1			93.3			97.4
Mill Index, %								99.3			89.1			101.8			98.0			97.9

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit

SUMMARY OF INSTITUTE DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XVIII

MILL P--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
167354	P-128	W.F.	12/19/55	11/25/55	-	43.2	41.0	42.4	13.2	12.0	12.5	141	88	111	376	296	344[a]	464	368	401[a]
167355	P-129	W.F.	12/19/55	11/25/55	-	43.8	41.8	42.8	13.0	11.7	12.4	126	82	107	416	264	353[a]	432	352	394[a]
167356	P-130	W.F.	12/19/55	11/25/55	-	43.2	40.8	41.9	12.9	11.4	12.4	134	97	114	416	304	349[a]	416	320	377[a]
167357	P-131	W.F.	12/19/55	11/28/55	-	42.6	40.6	41.4	12.7	11.8	12.1	127	76	105	368	288	337[a]	400	352	369[a]
167358	P-132	W.F.	12/19/55	11/28/55	-	43.2	41.0	41.8	12.7	11.9	12.3	129	91	105	368	304	329[a]	400	336	365[a]
167359	P-133	W.F.	12/19/55	12/12/55	-	44.2	42.0	43.2	13.0	11.9	12.4	125	74	107	368	312	349[a]	432	344	381[a]
167360	P-134	W.F.	12/19/55	12/12/55	-	44.8	42.0	42.9	13.5	11.6	12.4	135	78	107	400	272	347[a]	432	360	384[a]
167361	P-135	W.F.	12/19/55	12/13/55	-	43.2	40.0	41.6	12.2	11.1	11.7	134	83	113	384	272	326[a]	448	336	380[a]
167362	P-136	W.F.	12/19/55	12/13/55	-	43.0	41.2	42.0	12.7	11.6	12.1	130	80	108	384	320	349[a]	400	352	369[a]
167363	P-137	W.F.	12/19/55	12/13/55	-	45.2	42.2	43.6	13.2	11.5	12.5	127	84	102	416	304	354[a]	432	320	380[a]
Current Mill Average:								42.4			12.3			108			344			380
Cumulative Mill Average:								43.7			12.5			113			379			399
Mill Factor, %								97.0			98.4			95.6			90.8			95.2
Mill Index, %								98.6			96.1			98.2			96.9			99.0

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XIX

MILL Q--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
167025	Q-45	WF1S	12/ 6/55	11/27/55	3	45.0	41.0	42.8	14.5	13.0	13.7	134	76	106	400	304	343[a]	416	304	353[a]
167331	Q-46	WF1S	12/17/55	12/ 7/55	3	43.6	40.6	41.8	13.7	12.5	13.1	126	65	92	376	288	321[a]	448	328	363[a]
167407	Q-47	WF1S	12/20/55	12/ 9/55	3	43.8	42.4	43.4	14.2	12.9	13.8	134	78	105	344	272	314[a]	432	312	354[a]
167406	Q-48	WF1S	12/20/55	12/12/55	-	43.4	42.0	42.8	14.2	13.1	13.9	122	73	99	400	296	347[a]	392	344	369[a]
Current Mill Average:								42.7			13.6			101			331			360
Cumulative Mill Average:								42.5			13.3			110			342			379
Mill Factor, %								100.5			102.3			91.8			96.8			95.0
Mill Index, %								99.3			106.2			91.8			93.2			93.8

[a] This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XX

MILL E--MISCELLANEOUS

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
47-lb. Drum Linerboard																				
167028	E-187	W.F.	12/ 7/55	11/30/55	2	47.8	46.0	46.7	14.9	14.0	14.4	117	70	88	456	336	409[a]	408	312	374[a]
Current Mill Average:								46.7			14.4			88			409			374
Cumulative Mill Average:								47.0			14.2			103			396			405
Mill Factor, %								99.4			101.4			85.4			103.3			92.3
33-lb. Linerboard																				
167528	E-193	WFLS	12/27/55	12/21/55	2	34.0	32.4	33.2	10.9	10.0	10.4	92	60	79	336	232	270[a]	288	224	256[a]
38-lb. Linerboard																				
167369	E-192	WFLS	12/19/55	12/14/55	2	41.0	40.0	40.3	13.5	12.7	13.0	106	78	93	432	200	320[a]	400	304	345[a]

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XX (continued)

MILL E--MISCELLANEOUS

File No.	Mill Code	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
															In			Across		
						Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
						69-lb. Linerboard														
167143	E-189	WFLS	12/12/55	12/ 7/55	2	71.2	68.0	69.6	21.3	20.1	20.8	168	110	137	664	504	585[a]	784	640	699[a]
						90-lb. Linerboard														
167285	E-190	W.F.	12/15/55	12/ 9/55	2	91.8	87.8	89.4	30.4	27.3	29.2	179	114	154	816	656	755[a]	1120	736	900[a]

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

As a supplementary part of the Continuous Baseline Study, comparison of the mill test results with those obtained at The Institute of Paper Chemistry on corresponding samples have been included in this report. As may be noted in Table XXI, the atmospheric conditions used prior to and during the testing period varied considerably.

TABLE XXI

	Preconditioning			Conditioning		
Code	R.H., %	Temp., °F.	Time, hr.	R.H., %	Temp., °F.	Time, hr.
A		None		50	73	24
B	63-86	48-76	0.5	50	70	24-72
C	50	73	24-552	50	73	24-552
D	35-36	77-78	8	49-52	72	16
E		None		48-63	72-82	--
F		None		47-50	71-72	48
G		None		50	73	24
H		None		50	73	24
I		None		49-52	68-74	--
J		None		50	73	0.5
K	50	73	24	50	73	--
L		None		28-40	75-80	--
M		None		41-53	70-73	--
N	50	73	24	50	72-73	24
O		None		50	73	24
P	50	73	24-120	50	73	48
Q	52-55	71-74	5-40	50--61	72-74	1.5-2

A summary of the mill comparisons for the current period as compared with the previous period may be seen in Tables XXII and XXIII, respectively. The comparison for the various mills is given in Tables XXIV to XXXX, for the 42-lb. liner samples. A comparison of the special drum stock is given in Table XLI. In all the comparisons given in Tables XXII to XLI, the Institute's test values have been used as the reference line.

A comparison of the test data in Tables XXII and XXIII indicates that agreement between the mill and Institute data is good in the majority of cases. Table XXII shows the average difference encountered in the comparison of Institute and mill test results for the sample lots submitted by each mill for the current period, as well as the maximum difference encountered in comparing the Institute and mill test results for a given sample lot. In Table XXIII, the average differences shown for each test in Table XXII have been calculated on a percentage basis for each mill. In addition, for purposes of comparison, the average percentage differences for the preceding two periods are shown.

It may be noted in Table XXIII that the maximum variation between the average basis weight results of the Institute and those of a given mill on corresponding samples is two per cent for the current period. This maximum percentage variation agrees favorably with the corresponding variations for the previous periods. Further, it may be noted that the average basis weight results for Mills A, B, C, E, F, G, I, J, K, L, M, N, and Q are lower than those for the Institute, the average results for Mills D, H, and O are higher and the average result for Mill P is the same. In general, the agreement between Institute and mill basis weight results is good for all mills.

The maximum variation in caliper for the current period is seven per cent. Compared with the values for the Institute, the average result for Mill B is higher, and the average results for the other mills are lower. The accord between Institute and Mill caliper values is good with the exception of Mills E and M.

It may be noted in Table XXIII that the bursting strength results exhibit a maximum variation of seven per centfor the current period. The average results for Mills A, D, F, G, J, K, L, N, O, and P are lower than those for the Institute, the result for Mill H is the same, and the results for the other mills are higher. The agreement in bursting strength results is good for all mills with the possible exception of Mills C and E.

It may be seen in Tables XXII and XXIII that the average machine direction tear results for Mills D, G, I, N, P, and Q are higher than those for the Institute, the average result for Mill F is the same, and the results for the other mills are lower. The maximum variation for the current period is nineteen per cent. The differences encountered for Mills C, E, G, J, L, and M appear to be excessive.

With regard to the cross-machine direction tear results, it may be noted that the average results for Mills B, D, F, G, I, K, N, and Q are higher than those for the Institute, the average result for Mill P is the same, and the average results for the other mills are lower. The maximum variation for the current period is fourteen per cent. Only the differences for Mills G and N appear to be excessive.

TABLE XXII

SUMMARY OF TEST RESULT COMPARISONS
(Average Mill and Institute Results)

	Mills*																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
No. of Samples Compared	10	4	8	12	3	8	8	10	8	6	2	6	4	6	4	10	4
Basis Weight																	
Institute	43.6	42.7	43.6	43.0	42.4	42.1	43.7	42.8	42.9	43.2	45.0	43.2	42.6	42.7	42.7	42.4	42.7
Mill	43.0	42.5	43.3	43.4	42.2	41.6	43.1	43.5	42.6	42.8	44.2	42.6	41.8	42.3	43.0	42.4	42.2
Av. Diff.**	-0.6	-0.2	-0.3	+0.4	-0.2	-0.5	-0.6	+0.7	-0.3	-0.4	-0.8	-0.6	-0.8	-0.4	+0.3	0.0	-0.5
Max. Diff.***	-1.1	-0.6	-0.5	+1.2	-0.8	-1.1	-1.0	+1.5	-1.9	-0.7	-1.2	-1.1	-1.1	-1.0	+1.0	+0.8	-0.7
Caliper																	
Institute	12.4	11.8	13.8	13.0	13.6	11.6	12.2	12.2	12.1	12.4	13.6	13.5	13.0	12.4	11.4	12.3	13.6
Mill	12.3	12.0	13.3	12.8	12.6	11.3	11.9	12.1	12.0	11.9	13.1	12.9	12.1	12.1	11.2	12.0	13.0
Av. Diff.**	-0.1	+0.2	-0.5	-0.2	-1.0	-0.3	-0.3	-0.1	-0.1	-0.5	-0.5	-0.6	-0.9	-0.3	-0.2	-0.3	-0.6
Max. Diff.***	-0.4	+0.3	-0.8	-0.7	-1.4	-0.5	-0.4	-0.5	-0.2	-0.9	-0.6	-1.1	-1.1	-0.5	-0.3	-0.7	-0.8
Bursting Strength																	
Institute	114	113	99	109	101	107	117	112	106	111	112	111	106	107	112	108	101
Mill	113	121	105	105	108	104	113	112	110	108	111	108	107	104	107	105	102
Av. Diff.**	-1	+3	+6	-4	+7	-3	-4	0	+4	-3	-1	-3	+1	-3	-5	-3	+1
Max. Diff.***	-4	+4	+9	-11	+8	-12	-8	-7	+7	-9	-5	-10	+6	-6	-7	-11	+12
Tearing Strength, in																	
Institute	332	303	342	353	325	376	325	353	307	359	406	343	350	362	348	344	331
Mill	319	300	299	357	287	376	386	329	316	319	372	297	312	375	327	363	340
Av. Diff.**	-13	-3	-43	+4	-38	0	+61	-24	+9	-40	-34	-46	-38	+13	-21	+19	+9
Max. Diff.***	-32	-22	-63	+32	-49	+29	+104	-58	+39	-78	-36	-80	-60	+43	-37	+31	+54
Tearing Strength, across																	
Institute	383	355	369	386	363	404	394	385	364	372	406	378	381	393	376	380	360
Mill	374	378	359	391	350	418	448	363	381	357	409	351	346	448	369	380	380
Av. Diff.**	-9	+23	-10	+5	-13	+14	+54	-22	+17	-15	+3	-27	-35	+55	- 7	0	+20
Max. Diff.***	-33	+39	-44	+ 42	-40	+33	+92	-50	+44	-45	+16	-73	-59	+66	-21	-39	+58

* Comparison based on averages involved only those samples on which mill test data were submitted.

** Average difference is the difference between the Institute mill average and the mill average based on mill test data.

*** Maximum difference encountered in comparing the Institute average and the mill average for any sample submitted by that particular mill.

TABLE XXIII

COMPARISON OF INSTITUTE-MILL DIFFERENCES BY PERIODS

Mill	Period	Differences, per cent				
		Basis Weight	Caliper	Bursting Strength	Tearing Strength, In	Across
A	Current	-1	-0.8	-0.9	-4	-2
	101st	-2	-2	-2	-5	-4
	100th	-2	-0.8	-0.8	-1	-2
B	Current	-0.5	+2	+3	-1	+6
	101st	-0.5	0	+2	-1	+5
	100th	-2	-2	+0.9	-3	+0.5
C	Current	-0.7	-4	+6	-13	-3
	101st	-0.2	-0.8	+3	-6	+3
	100th	-0.5	-3	+3	-2	+5
D	Current	+1	-2	-4	+1	+1
	101st	+0.5	-2	-4	-4	-3
	100th	+1	-0.8	-0.9	+3	+1
E	Current	-0.5	-7	+7	-12	-4
	101st	-0.5	-10	+7	-10	-0.8
	100th	+0.7	-9	+5	-16	-10
F	Current	-1	-3	-3	0	+3
	101st	-0.2	-3	-0.9	+9	+10
	100th	-0.5	-3	+5	+4	+6
G	Current	-1	-2	-3	+19	+14
	101st	-1	-3	-0.9	+15	+7
	100th	0	-3	-0.9	+12	+14
H	Current	+2	-0.8	0	-7	+6
	101st	+1	-0.8	+0.9	-6	-4
	100th	+2	-0.8	-3	-4	+5
I	Current	-0.7	-0.8	+4	+3	+5
	101st	-1	-0.8	+1	+0.9	+5
	100th	+0.2	0	+0.9	+13	+15
J	Current	-0.9	-4	-3	-11	-4
	101st	-1	-4	-5	-9	-0.5
	100th	-0.7	-4	-3	-4	+2
K	Current	-2	-4	-0.9	-8	+0.7
	101st	-1	-3	+4	-5	+2
	100th	-0.9	-4	+3	-4	+1
L	Current	-1	-4	-3	-13	-7
	101st	-2	-3	-3	-6	-2
	100th	-2	-4	+0.9	-1	+0.3
M	Current	-2	-7	+0.9	-11	-9
	101st	-0.7	-4	0	+2	-3
	100th	-1	-5	+2	+3	+0.5
N	Current	-0.9	-2	-3	+4	+14
	101st	-0.5	-2	+0.9	+9	+17
	100th	0	-2	0	+8	+21
O	Current	+0.7	-2	-4	-6	-2
	101st	+0.5	-2	+2	-8	-0.5
	100th	0	-3	+0.9	-12	-9
P	Current	0	-2	-3	+6	0
	101st	-0.9	-4	-3	+7	+0.3
	100th	-0.2	-2	-4	+3	+1
Q	Current	-1	-4	+1	+3	+6
	101st	-3	-4	+4	0	+4
	100th	-2	-3	+10	+6	+9

COMPARISON OF INSTITUTE AND MILL DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955

TABLE XXIV

MILL A--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
166988	A-706	W.F.	11/20/55	2	44.1	43.6	-0.5	12.6	12.5	-0.1	116	118	+2	347	335	-12	405[a]	396	- 9
166989	A-707	W.F.	11/22/55	2	44.4	43.4	-1.0	12.6	12.4	-0.2	117	116	-1	337[a]	342	+ 5	405[a]	391	-14
167200	A-708	W.F.	11/27/55	2	43.4	42.9	-0.5	12.0	12.0	0.0	115	115	0	317[a]	313	- 4	373[a]	375	+ 2
167201	A-709	W.F.	11/27/55	2	43.1	42.7	-0.4	11.9	12.2	+0.3	114	115	+1	314	314	0	368[a]	379	+11
167364	A-710	W.F.	12/ 4/55	1	43.1	42.5	-0.6	12.7	12.8	+0.1	108	109	+1	341	315	-26	385[a]	373	-12
167365	A-711	W.F.	12/ 4/55	1	43.3	42.8	-0.5	12.6	12.8	+0.2	114	110	-4	341	320	-21	375[a]	375	0
167450	A-712	W.F.	12/11/55	2	43.5	42.6	-0.9	12.5	12.4	-0.1	116	113	-3	333	301	-32	387[a]	365	-22
167451	A-713	W.F.	12/11/55	2	43.2	42.7	-0.5	12.5	12.3	-0.2	112	113	+1	333	305	-28	372[a]	366	- 6
167499	A-714	W.F.	12/18/55	1	44.0	42.9	-1.1	12.2	11.9	-0.3	114	113	-1	329[a]	343	+14	373[a]	369	- 4
167498	A-715	W.F.	12/18/55	2	44.3	43.6	-0.7	12.4	12.0	-0.4	114	112	-2	328	301	-27	385[a]	352	-33
Current Mill Average:					43.6	43.0	-0.6	12.4	12.3	-0.1	114	113	-1	332	319	-13	383	374	- 9

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XXV

MILL B--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
167286	B-1254	W.F.	11/21/55	1	42.6	42.4	-0.2	11.9	12.0	+0.1	118	121	+3	305	301	- 4	361[a]	385	+24
167287	B-1255	W.F.	11/24/55	1	43.0	42.4	-0.6	11.9	12.1	+0.2	118	121	+3	300	319	+19	374[a]	384	+10
167288	B-1256	W.F.	12/ 5/55	1	42.7	42.8	+0.1	11.7	11.9	+0.2	118	122	+4	307[a]	285	-22	344[a]	363	+19
167289	B-1257	W.F.	12/ 8/55	1	42.5	42.4	-0.1	11.7	12.0	+0.3	120	121	+1	299[a]	297	- 2	342[a]	381	+39
Current Mill Average:					42.7	42.5	-0.2	11.8	12.0	+0.2	118	121	+3	303	300	- 3	355	378	+23

TABLE XXVI

MILL C--42-LB. LINERBOARD

167473	C-713	WF ISL	11/16/55	1	44.1	44.1	0.0	13.8	13.4	-0.4	96	103	+7	342[a]	313	-29	371[a]	375	+ 4
167474	C-714	WF ISL	11/16/55	1	44.2	43.9	-0.3	13.8	13.4	-0.4	100	102	+2	351[a]	313	-38	381[a]	377	- 4
167475	C-715	WF ISL	11/29/55	1	43.7	43.2	-0.5	13.9	13.3	-0.6	99	102	+3	345[a]	302	-43	362[a]	359	- 3
167476	C-716	WF ISL	11/29/55	1	43.7	43.3	-0.4	13.9	13.4	-0.5	97	102	+5	347[a]	300	-47	365[a]	367	+ 2
167453	C-717	WF ISL	12/ 6/55	1	42.5	42.3	-0.2	13.9	13.1	-0.8	96	104	+8	338	297	-41	357[a]	360	+ 3
167454	C-718	WF ISL	12/ 6/55	1	42.3	42.2	-0.1	13.5	13.2	-0.3	102	105	+3	328[a]	300	-28	363[a]	354	- 9
167455	C-719	WF ISL	12/11/55	1	44.4	43.9	-0.5	13.8	13.5	-0.3	103	112	+9	347	284	-63	381[a]	337	-44
167464	C-720	WF ISL	12/11/55	1	44.1	43.7	-0.4	13.7	13.3	-0.4	102	109	+7	341[a]	282	-59	375[a]	343	-32
Current Mill Average:					43.6	43.3	-0.3	13.8	13.3	-0.5	99	105	+6	342	299	-43	369	359	-10

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XXVII

MILL D--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
166992	D-921	W.F.	11/23/55	4	43.3	43.0	-0.3	13.2	12.8	-0.4	107	103	- 4	357[a]	345	-12	396[a]	393	- 3
166993	D-922	W.F.	11/24/55	4	43.9	44.2	+0.3	13.4	13.1	-0.3	106	107	+ 1	368[a]	391	+23	411[a]	415	+ 4
166994	D-923	W.F.	11/25/55	4	42.6	43.4	+0.8	13.0	13.0	0.0	101	102	+ 1	329[a]	356	+27	375[a]	408	+33
167003	D-924	W.F.	12/ 1/55	4	43.3	43.5	+0.2	13.0	12.9	-0.1	110	106	- 4	360[a]	353	- 7	380[a]	377	- 3
167004	D-925	W.F.	12/ 2/55	4	44.2	43.6	-0.6	12.8	12.6	-0.2	115	114	- 1	371[a]	347	-24	423[a]	389	-34
167005	D-926	W.F.	12/ 3/55	4	42.0	43.1	+1.1	13.2	13.0	-0.2	108	105	- 3	340[a]	372	+32	388[a]	401	+13
167255	D-927	W.F.	12/ 8/55	4	44.4	44.0	-0.4	13.3	13.0	-0.3	114	104	-10	363[a]	360	- 3	421[a]	404	-17
167256	D-928	W.F.	12/ 9/55	4	43.4	42.7	-0.7	13.1	12.4	-0.7	109	98	-11	365[a]	339	-26	373[a]	376	+ 3
167257	D-929	W.F.	12/10/55	4	42.9	44.1	+1.2	13.1	13.2	+0.1	113	107	- 6	348[a]	375	+27	386[a]	408	+22
167338	D-930	W.F.	12/15/55	4	41.6	42.4	+0.8	12.3	12.1	-0.2	100	101	+ 1	332[a]	339	+ 7	342[a]	384	+42
167339	D-931	W.F.	12/16/55	4	42.3	43.0	+0.7	12.8	12.8	0.0	108	100	- 8	359[a]	360	+ 1	355[a]	357	+ 2
167340	D-932	W.F.	12/17/55	4	42.6	43.8	+1.2	12.5	12.3	-0.2	112	110	- 2	341[a]	353	+12	385[a]	381	- 4
Current Mill Average:					43.0	43.4	+0.4	13.0	12.8	-0.2	109	105	- 4	353	357	+ 4	386	391	+ 5

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XXVIII

MILL E--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
167029	E-188	W.F.	12/ 2/55	2	43.2	43.9	+0.7	13.9	13	-0.9	102	110	+8	353[a]	325	-28	378[a]	397	+19
167368	E-191	WFlS	12/13/55	2	43.4	42.6	-0.8	14.4	13	-1.4	105	110	+5	325[a]	288	-37	381[a]	341	-40
167529	E-194	WFlS	12/23/55	2	40.6	40.2	-0.4	12.7	11.8	-0.9	97	104	+7	297[a]	248	-49	330[a]	312	-18
Current Mill Average:					42.4	42.2	-0.2	13.6	12.6	-1.0	101	108	+7	325	287	-38	363	350	-13

TABLE XXIX

MILL F--42-LB. LINERBOARD

167202	F-64	W.B.	11/11/55	-	42.0	41.4	-0.6	11.6	11.4	-0.2	110	110	0	367[a]	396	+29	417[a]	436	+19
167203	F-65	W.B.	11/15/55	-	41.8	41.1	-0.7	11.5	11.3	-0.2	102	106	+ 4	366[a]	352	-14	394[a]	416	+22
167090	F-66	W.B.	11/16/55	-	43.7	43.0	-0.7	11.9	11.6	-0.3	105	102	- 3	383[a]	388	+ 5	411[a]	444	+33
167091	F-67	W.B.	11/22/55	-	41.6	41.7	+0.1	11.6	11.3	-0.3	102	105	+ 3	375[a]	373	- 2	404[a]	433	+29
167138	F-68	W.B.	11/23/55	-	41.6	40.9	-0.7	10.9	10.7	-0.2	104	101	- 3	369[a]	356	-13	371[a]	389	+18
167139	F-69	W.B.	11/23/55	-	42.5	41.4	-1.1	11.9	11.5	-0.4	99	97	- 2	389[a]	377	-12	423[a]	405	-18
167291	F-70	W.B.	11/25/55	-	41.9	41.9	0.0	11.5	11.0	-0.5	119	107	-12	378[a]	395	+17	410[a]	427	+17
167292	F-71	W.B.	11/26/55	-	41.5	41.4	-0.1	11.5	11.2	-0.3	114	107	- 7	376[a]	371	- 5	402[a]	397	- 5
Current Mill Average:					42.1	41.6	-0.5	11.6	11.3	-0.3	107	104	- 3	376	376	0	404	418	+14

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XXX

MILL G--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
167204	G-693	W.F.	12/ 5/55	2	44.1	43.3	-0.8	12.3	11.9	-0.4	120	119	-1	323[a]	390	+ 67	399[a]	460	+61
167205	G-694	W.F.	12/ 5/55	2	43.1	42.1	-1.0	12.3	12.0	-0.3	116	110	-6	334	354	+ 20	386[a]	429	+43
167206	G-695	W.F.	12/ 5/55	2	44.2	43.6	-0.6	12.2	12.0	-0.2	121	116	-5	328	432	+104	407[a]	499	+92
167290	G-696	W.F.	12/ 5/55	2	42.4	42.2	-0.2	12.3	12.1	-0.2	111	112	+1	314[a]	397	+ 83	397[a]	474	+77
167307	G-697	W.F.	12/ 6/55	2	44.0	43.5	-0.5	12.2	12.0	-0.2	122	114	-8	326[a]	387	+ 61	410[a]	431	+21
167366	G-698	W.F.	12/ 7/55	2	43.1	42.2	-0.9	12.2	12.0	-0.2	114	112	-2	314	347	+ 33	378[a]	410	+32
167308	G-699	W.F.	12/ 7/55	2	44.2	43.9	-0.3	11.9	11.8	-0.1	117	109	-8	336	389	+ 53	396[a]	440	+44
167309	G-700	W.F.	12/ 7/55	2	44.2	44.0	-0.2	12.0	11.7	-0.3	116	110	-6	325[a]	390	+ 65	380[a]	438	+58
Current Mill Average:					43.7	43.1	-0.6	12.2	11.9	-0.3	117	113	-4	325	386	+ 61	394	448	+54

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XXXI

MILL H--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
166986	H-537	W.F.[b]	11/13/55	2	42.6	44.1	+1.5	11.9	11.7	-0.2	110	108	-2	344[a]	353	+ 9	379[a]	394	+15
166987	H-538	W.F.[b]	11/14/55	2	43.3	44.5	+1.2	12.0	11.7	-0.3	113	112	-1	362[a]	364	+ 2	391[a]	408	+17
167144	H-539	W.F.[b]	11/24/55	2	42.3	42.8	+0.5	12.6	12.1	-0.5	112	113	+1	329[a]	309	-20	372[a]	357	-15
167145	H-540	W.F.[b]	11/25/55	2	42.2	42.9	+0.7	12.3	12.1	-0.2	110	114	+4	343[a]	301	-42	381[a]	353	-28
167146	H-541	W.F.[b]	11/30/55	2	42.8	43.0	+0.2	12.3	12.2	-0.1	109	109	0	362[a]	351	-11	413[a]	375	-38
167147	H-542	W.F.[b]	12/ 1/55	2	42.3	43.4	+1.1	12.4	12.3	-0.1	109	108	-1	371[a]	338	-33	393[a]	367	-26
167207	H-543	W.F.[b]	12/ 5/55	2	42.4	43.0	+0.6	12.3	12.2	-0.1	109	111	+2	337	337	0	363[a]	361	- 2
167208	H-544	W.F.[b]	12/ 6/55	2	43.2	43.3	+0.1	12.2	12.1	-0.1	112	118	+6	347[a]	289	-58	375[a]	326	-49
167530	H-545	W.F.[b]	12/16/55	2	43.4	43.7	+0.3	12.2	12.1	-0.1	119	113	-6	379[a]	323	-56	395[a]	349	-46
167531	H-546	W.F.[b]	12/17/55	2	43.2	43.8	+0.6	12.2	12.2	0.0	122	115	-7	357[a]	323	-34	389[a]	339	-50
Current Mill Average:					42.8	43.5	+0.7	12.2	12.1	-0.1	112	112	0	353	329	-24	385	363	-22

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.
[b]The mill data sheet identifies the finish as WF1S.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XXXII

MILL I--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
166985	I-509	WF1S	11/24/55	1	43.0	42.5	-0.5	12.3	12.1	-0.2	106	110	+4	302[a]	341	+39	367[a]	377	+10
167142	I-509	WF1S	12/ 4/55	1	42.6	42.8	+0.2	12.2	12.3	+0.1	102	107	+5	315[a]	316	+ 1	358[a]	389	+31
167092	I-510	WF1S	12/ 6/55	1	42.4	42.4	0.0	11.8	11.9	+0.1	110	112	+2	303[a]	316	+13	357[a]	401	+44
167284	I-511	WF1S	12/ 7/55	1	42.8	42.6	-0.2	12.0	12.0	0.0	111	110	-1	321[a]	308	-13	380[a]	385	+ 5
167452	I-512	WF1S	12/ 9/55	1	42.4	42.6	+0.2	11.9	11.8	-0.1	107	114	+7	287	291	+ 4	358[a]	369	+11
167405	I-513	WF1S	12/12/55	1	43.2	42.8	-0.4	12.3	12.2	-0.1	103	107	+4	299[a]	290	- 9	355[a]	365	+10
167500	I-514	WF1S	12/15/55	1	44.4	42.5	-1.9	12.4	12.3	-0.1	107	109	+2	323[a]	343	+20	376[a]	391	+15
167501	I-515	WF1S	12/16/55	1	42.8	42.6	-0.2	11.9	11.8	-0.1	105	109	+4	307[a]	325	+18	365[a]	372	+ 7
Current Mill Average:					42.9	42.6	-0.3	12.1	12.0	-0.1	106	110	+4	307	316	+ 9	364	381	+17

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XXXIII

MILL J--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
166990	J-567	D.F.	11/20/55	-	43.7	43.0	-0.7	13.3	12.4	-0.9	109	104	-5	352[a]	307	-45	374[a]	356	-18
166991	J-568	D.F.	11/20/55	-	43.9	43.4	-0.5	13.3	12.6	-0.7	108	104	-4	358[a]	321	-37	373[a]	371	- 2
167467	J-569	D.F.	11/28/55	-	42.8	42.5	-0.3	11.6	11.2	-0.4	109	112	+3	331[a]	318	-13	343[a]	336	- 7
167468	J-570	D.F.	11/28/55	-	43.6	43.0	-0.6	11.3	11.1	-0.2	114	113	-1	351[a]	273	-78	360[a]	315	-45
167469	J-571	W.F.	12/ 5/55	-	42.9	42.8	-0.1	12.4	11.9	-0.5	113	114	+1	382[a]	371	-11	391[a]	407	+16
167470	J-572	W.F.	12/ 5/55	-	42.2	42.2	0.0	12.7	12.1	-0.6	111	102	-9	381[a]	321	-60	391[a]	357	-34
Current Mill Average:					43.2	42.8	-0.4	12.4	11.9	-0.5	111	108	-3	359	319	-40	372	357	-15

TABLE XXXIV

MILL K--42-LB. LINERBOARD

167297	K-36	S.F.	12/ 6/55	7	44.4	44.0	-0.4	13.5	13.1	-0.4	115	110	-5	418	382	-36	411[a]	427	+16
167367	K-37	S.F.	12/13/55	7	45.5	44.3	-1.2	13.6	13.0	-0.6	108	111	+3	393[a]	362	-31	401[a]	391	-10
Current Mill Average:					45.0	44.2	-0.8	13.6	13.1	-0.5	112	111	-1	406	372	-34	406	409	+ 3

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XXXV

MILL L--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
167026	L-409		11/ 7/55	1	42.2	42.2	0.0	13.3	13.1	-0.2	111	109	- 2	339[a]	351	+12	377[a]	386	+ 9
167027	L-410		11/10/55	1	43.2	42.5	-0.7	13.6	13.4	-0.2	109	106	- 3	353[a]	290	-63	378[a]	352	-26
167293	L-411		11/14/55	1	43.5	42.4	-1.1	13.7	13.2	-0.5	106	109	+ 3	349[a]	279	-70	388[a]	368	-20
167294	L-412		11/19/55	1	43.1	42.6	-0.5	13.9	12.8	-1.1	107	108	+ 1	340[a]	338	- 2	373[a]	392	+19
167295	L-413		11/21/55	1	43.8	42.8	-1.0	13.3	12.5	-0.8	118	108	-10	339[a]	271	-68	375[a]	308	-67
167296	L-414		11/25/55	1	43.3	42.9	-0.4	13.5	12.7	-0.8	114	108	- 6	337[a]	257	-80	375[a]	302	-73
Current Mill Average:					43.2	42.6	-0.6	13.5	12.9	-0.6	111	108	- 3	343	297	-46	378	351	-27

TABLE XXXVI

MILL M--42-LB. LINERBOARD

167093	M-352	W.	11/23/55	4	43.6	42.8	-0.8	13.4	12.3	-1.1	105	102	-3	379[a]	361	-18	387[a]	363	-24
167094	M-353	W.	11/26/55	2	43.1	42.0	-1.1	12.9	12.2	-0.7	109	109	0	347	287	-60	387[a]	328	-59
167471	M-354	W.	12/ 5/55	2	41.8	41.0	-0.8	12.8	11.8	-1.0	106	110	+4	345[a]	303	-42	372[a]	353	-19
167472	M-355	W.	12/ 9/55	2	41.8	41.6	-0.2	12.6	12.0	-0.6	104	110	+6	327[a]	296	-31	378[a]	339	-39
Current Mill Average:					42.6	41.8	-0.8	13.0	12.1	-0.9	106	107	+1	350	312	-38	381	346	-35

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XXXVII

MILL N--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
166983	N-171	WF1S	11/18/55	1	42.2	41.5	-0.7	12.7	12.2	-0.5	104	100	-4	333[a]	340	+ 7	370[a]	429	+59
166984	N-172	WF1S	11/19/55	1	42.9	42.4	-0.5	12.5	12.2	-0.3	103	102	-1	358[a]	375	+17	388[a]	452	+64
167030	N-173	WF1S	11/29/55	1	43.1	42.1	-1.0	12.5	12.1	-0.4	102	98	-4	379[a]	388	+ 9	383[a]	443	+60
167031	N-174	WF1S	11/30/55	1	43.0	42.6	-0.4	12.5	12.1	-0.4	107	101	-6	355[a]	398	+43	399[a]	414	+15
167448	N-175	WF1S	12/ 8/55	1	43.0	43.1	+0.1	12.3	12.1	-0.2	117	112	-5	383[a]	393	+10	421[a]	484	+63
167449	N-176	WF1S	12/ 9/55	1	42.0	42.0	0.0	12.2	11.9	-0.3	112	113	+1	361[a]	359	- 2	399[a]	465	+66
Current Mill Average:					42.7	42.3	-0.4	12.4	12.1	-0.3	107	104	-3	362	375	+13	393	448	+55

TABLE XXXVIII

MILL O--42-LB. LINERBOARD

167001	O-100	W.F.	11/18/55	4	41.9	42.9	+1.0	11.1	10.9	-0.2	107	105	-2	331[a]	311	-20	366[a]	352	-14
167002	O-101	W.F.	11/18/55	4	42.8	43.3	+0.5	11.3	11.2	-0.1	109	107	-2	341[a]	337	- 4	375[a]	377	+ 2
167140	O-102	W.F.	11/27/55	4	43.0	42.8	-0.2	11.7	11.5	-0.2	113	106	-7	361[a]	337	-24	376[a]	379	+ 3
167141	O-103	W.F.	11/27/55	4	43.0	43.0	0.0	11.5	11.2	-0.3	117	112	-5	358[a]	321	-37	388[a]	367	-21
Current Mill Average:					42.7	43.0	+0.3	11.4	11.2	-0.2	112	107	-5	348	327	-21	376	369	- 7

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XXXIX

MILL P--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
167354	P-128	W.F.	11/25/55	-	42.4	42.2	-0.2	12.5	12.1	-0.4	111	106	- 5	344[a]	361	+17	401[a]	397	- 4
167355	P-129	W.F.	11/25/55	-	42.8	42.5	-0.3	12.4	12.2	-0.2	107	114	+ 7	353[a]	379	+26	394[a]	397	+ 3
167356	P-130	W.F.	11/25/55	-	41.9	41.6	-0.3	12.4	12.0	-0.4	114	103	-11	349[a]	355	+ 6	377[a]	381	+ 4
167357	P-131	W.F.	11/28/55	-	41.4	41.2	-0.2	12.1	12.1	0.0	105	100	- 5	337[a]	367	+30	369[a]	372	+ 3
167358	P-132	W.F.	11/28/55	-	41.8	41.6	-0.2	12.3	12.0	-0.3	105	106	+ 1	329[a]	360	+31	365[a]	373	+ 8
167359	P-133	W.F.	12/12/55	-	43.2	42.9	-0.3	12.4	11.7	-0.7	107	106	- 1	349[a]	365	+16	381[a]	387	+ 6
167360	P-134	W.F.	12/12/55	-	42.9	43.3	+0.4	12.4	12.1	-0.3	107	105	- 2	347[a]	360	+13	384[a]	371	-13
167361	P-135	W.F.	12/13/55	-	41.6	41.6	0.0	11.7	11.6	-0.1	113	105	- 8	326[a]	325	- 1	380[a]	341	-39
167362	P-136	W.F.	12/13/55	-	42.0	42.4	+0.5	12.1	12.1	0.0	108	103	- 5	349[a]	368	+19	369[a]	392	+23
167363	P-137	W.F.	12/13/55	-	43.6	44.4	+0.8	12.5	12.1	-0.4	102	103	+ 1	354[a]	385	+31	380[a]	391	+11
Current Mill Average:					42.4	42.4	0.0	12.3	12.0	-0.3	108	105	- 3	344	363	+19	380	380	0

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XXXX

MILL Q--42-LB. LINERBOARD

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
167025	Q-45	WF1S	11/27/55	3	42.8	42.3	-0.5	13.7	13.1	-0.6	106	99	- 7	343[a]	329	-14	353[a]	360	+ 7
167331	Q-46	WF1S	12/ 7/55	3	41.8	41.7	-0.1	13.1	12.7	-0.4	92	104	+12	321[a]	375	+54	363[a]	421	+58
167407	Q-47	WF1S	12/ 9/55	3	43.4	42.7	-0.7	13.8	13.1	-0.7	105	102	- 3	314[a]	328	+14	354[a]	369	+15
167406	Q-48	WF1S	12/12/55	-	42.8	42.1	-0.7	13.9	13.1	-0.8	99	101	+ 2	347[a]	327	-20	369[a]	368	- 1
Current Mill Average:					42.7	42.2	-0.5	13.6	13.0	-0.6	101	102	+ 1	331	340	+ 9	360	380	+20

TABLE XLI

MILL E--MISCELLANEOUS

47-lb. Drum Linerboard

167028	E-187	W.F.	11/30/55	2	46.7	47.4	+0.7	14.4	13.3	-1.1	88	93	+5	409[a]	404	-5	374[a]	410	+36
Current Mill Average:					46.7	47.4	+0.7	14.4	13.3	-1.1	88	93	+5	409	404	-5	374	410	+36

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--DECEMBER 1 THROUGH DECEMBER 31, 1955 (continued)

TABLE XLI (continued)

MILL E--MISCELLANEOUS

File No.	Mill Code	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
					33-lb. Linerboard														
167528	E-193	WF1S	12/21/55	2	33.2	33.1	-0.1	10.4	10.2	-0.2	79	84	+5	270[a]	224	-46	256[a]	266	+10
					38-lb. Linerboard														
167369	E-192	WF1S	12/14/55	2	40.3	40.0	-0.3	13.0	12.0	-1.0	93	100	+7	320[a]	298	-22	345[a]	318	-27
					69-lb. Linerboard														
167143	E-189	WF1S	12/ 7/55	2	69.6	71.4	+1.8	20.8	19.9	-0.9	137	144	+7	585[a]	592	+ 7	699[a]	677	-22
					90-lb. Linerboard														
167285	E-190	W.F.	12/ 9/55	2	89.4	90.6	+1.2	29.2	27.5	-1.7	154	157	+3	755[a]	838	+83	900[a]	913	+13

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.